

First record of the family Cerophytidae and Cerophytum elateroides (Latreille, 1804) (Insecta: Coleoptera: Elateroidea) in Bulgaria



Denis Gradinarov*, Teodora Teofilova, Nikolay Kodzhabashev gradinarov@uni-sofia.bg

Introduction

The beetles from the family Cerophytidae are known as rare click beetles. The family is represented by a single European species. Cerophytum elateroides is a rare species everywhere in Europe, and is an indicator of the presence of rotting wood in old broad-leaved woodlands.

The aim of this study is to present the first record of *Cerophytum elateroides* in Bulgaria, recognizing this way the first country record of the family *Cerophytidae*, and to add new data to the knowledge of its distribution and ecology.

Material and Methods

The single female specimen was collected in the period 22 March – 7 July 2019 via pitfall trapping, in the Sarnena Sredna Gora Mts., in the region of the Hut Svezhen.

Formaldehyde was used as a fixative.

A B

Family: Cerophytidae Latreille, 1834 Genus: Cerophytum Latreille, 1806 Species: Cerophytum elateroides (Latreille, 1804) A. dorsal, B. lateral, scale bar 1 mm

Romania

Romania

Turkey

Greece

Turkey



Results

New data/Material examined: Central Bulgaria, Sarnena Sredna Gora Mts., 22.III-7.VII.2019, 1 km NW Hut Svezhen, 42°31'03''N, 25°02'40''E, 1022 m, mesophilous beech forest at the ridge of the mountain, with many old trees, leg. T. Teofilova & N. Kodzhabashev, 1\$\overline{9}\$. We collected Cerophytum elateroides in old and well preserved beech forest.

An interesting fact is, that during the same study, and in the same sampling site, we also captured the lesser glow-worm *Phosphaenus hemipterus* (Goeze, 1777) (Lampyridae), which was the first country record for that species, too.

An important feature of the habitat is the relatively well preserved rotting wood (both standing and fallen), which along with the thick leaf layer is important for maintaining high ground humidity for the most of the year. Such habitats are severely limited in the mountain (and in Bulgaria), due to frequent and irrational forestry activities, as well as to the relatively small area of the beech forests. This type of habitat is of primal importance for the conservation of the biodiversity of Sarnena Gora Mts.

Today Cerophytum elateroides is probably rare everywhere in Europe. Its rarity may be attributed to the great scarcity of suitable habitats, i.e. old dying deciduous trees, due to the increasing human impact on the forests. Habitat loss is mostly related to logging and wood harvesting and the decline of veteran trees throughout the landscape, as well as the lack of land management targeted at promotion of recruitment of new generations of trees. The species is included in European Red List of Saproxylic Beetles with the category "Vulnerable".













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